

Stock Data

Share Price: 7.75p
Market Cap.: £302.0m*
Shares in issue: 3,896.9m*

*post-Placing figures

Company Profile

Sector: Alternative Energy
Ticker: PHE
Exchange: AIM

Activities

PowerHouse Energy Group plc (‘the Company’, ‘PowerHouse’ or ‘PHE’) has developed a proprietary process technology - DMG® - which can utilise waste plastic, end-of-life-tyres, and other waste streams to efficiently and economically convert them into syngas from which valuable products, such as chemical precursors, hydrogen, electricity and other industrial products may be derived. Its technology is one of the world’s first proven, modular, hydrogen from waste (‘HfW’) processes.

Company website: www.powerhouseenergy.net/

1 year share price performance



Source: [LSE](#)

Past performance is not an indication of future performance

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PowerHouse Energy Group plc

Powerhouse this morning has confirmed its successful raising of £10 million (gross) new funding (‘the ‘Fundraising’) by way of an oversubscribed, strategic equity placing and subscription priced at 5.5p per share (the ‘Issue Price’). Participating in the Fundraising were both an institutional investor and a small number of private shareholders, including the White Family (the Company’s largest shareholder). The Directors believe that the availability of these new cash resources will expedite significantly financial close of the funding needs for the first commercial scale DMG® installation utilising the Company’s technology, which is targeted to be reached during the first quarter of 2021. Completion of the first reference site is clearly commercially and strategically important, not least because it will permit participation at project level in the first commercial deployment (rather than just as a licensor of the DMG® technology), but also that it will become a model for the technology’s anticipated UK roll-out and provide a springboard for commencement of Powerhouse’s overseas marketing in order to attract international customers and partners. Admission of the new ordinary shares to trading on AIM is expected to occur on or around 21 January 2021. This Fundraising was exclusively undertaken and completed by TPI.

Use of funds

Powerhouse is expected to use the net new funds to advance the project procurement and delivery of long lead items before the formal financial close, thereby protecting the targeted timeline and advancing the completion of its DMG® technology at [Protos](#). The Company should also find itself ideally positioned to complete negotiations to apply the net funds to invest, alongside [PeelNRE Environmental Limited](#) (‘Peel’), in a Special Project Vehicle (‘SPV’) which is expected to be established to deliver the Protos plant. By providing investment for this SPV, Powerhouse believes that financial close can be significantly expedited.

Applying the net funds in this way gives the Company access to extra revenue via participation at project level on the first commercial deployment (rather than just being a licensor of the DMG® technology). As such, it also expedites execution of Powerhouse’s overall business plan, providing it with greater beneficial technical exposure in the project delivery phase. The Directors consider these steps are likely to bring forward the date on which the licence fee income, which is expected to constitute the main part of its future revenues, starts to be received.

Peel Warrant (the ‘Warrant’)

On [9 September 2020](#), [Peel Holdings \(IoM\) Limited](#) was granted a Warrant that is exercisable for a period of six months from the date when financial close is reached on Protos. In addition to the Fundraising announced today, the exercise of the Warrant would bring a further £10.2 million of cash into Powerhouse, placing it on a very secure financial footing for its UK operations while also facilitating the deployment of its technology to international customers.

Related Party Transaction

The White Family has been a long-term supporter of Powerhouse and invested approximately £2.6m million in the Fundraising. Their participation is considered a [Related Party Transaction](#) under the AIM rules as together the White Family currently holds 26.05% of the share capital. Following completion of the Fundraising the White Family in total will hold ordinary shares representing an unchanged 26.05%.

DMG® technology competitive with electrolysis

The DMG® process is a proprietary hydrogen-from-waste technology. Its modular design can generate up to 2 tonnes of road-fuel quality hydrogen and more than 58MWh of exportable electricity per day, thereby accelerating the international transition to

clean energy while also providing a solution for non-recyclable plastics. Presently [cost-competitive](#) (based on capex and running costs) with [electrolyser technologies](#), purity levels of 99.99% mean that DMG® output can be utilised in all fuel cell technologies, along with industrial applications including direct heating.

While the scaling-up of competing technologies might, in future years, be expected to improve production economics, the fact that long-term incentives for extraction of non-reusable plastics from municipal waste together with the fact that the process produces low levels of safe residues and requires a small operating footprint, is likely to make it to regional choice for deployment at enterprise and community level. This is highlighted by the fact that beyond the expanded 11-unit agreement already reached, Peel has already identified a further 77 sites in the UK, suggesting a high level of interest and a rapid route to market for the technology. Internationally, enquiries have also been followed up from various international locations, including Australia, Japan, Poland and Thailand, where Powerhouse prospectively expects to contract through a licencing plus engineering sales agreement model in order to minimise future operational and capital needs.

Potential for positive returns in less than two years

Today's successful fund raising has substantially lowered the Protos site's residual commissioning risk. Together with the anticipated exercise of the Peel Warrant, Powerhouse now appears to be on a very secure financial footing. Beyond the immediate need to complete the DMG® technology installation at Protos, the Company now has access to all foreseeable working capital and corporate needs in support of Peel's accelerated UK roll-out, while also facilitating its planned overseas marketing and licensing drive. The adoption of a low cost, licence fee based business model, leads TPI to believe that Powerhouse could potentially achieve cashflow breakeven or better, based simply on the commissioning of just two Protos-sized projects (each targeting production of, say, 3.8MWe on site and exporting 3.4MWe electricity when in power-only operation and up to 2 tonnes of hydrogen/day when in combined operation). Considering the lengthy existing project pipeline already under consideration by Peel, together with fees from expected feedstock testing and site-specific engineering work, TPI considers the recent completion of the [Waste2Tricity Limited](#) ("W2T") acquisition could enable the capital-light Company to start generating returns for shareholders within the next two years, based on its expectation of having two fully operational sites plus a further four under construction by then. During this period, Powerhouse is also expected to have progressed its planned international licensing project in place with selected, well-financed partners based on exclusivity terms similarly to those it has already negotiated and in place for the UK. On this basis, TPI considers Powerhouse could possibly generate its first meaningful profits before end-2023.

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